

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CL

AIMS:

1. (Currently Amended) A method for preparing an $\text{Li}_{1+\alpha}\text{V}_3\text{O}_8$ compound, characterized in that it consists in comprising preparing a precursor gel by reacting hydrogen peroxide with $\alpha\text{-V}_2\text{O}_5$ in aqueous medium, in the presence of a lithium precursor, and then in subjecting said gel to a heat treatment in an oxidizing atmosphere at a temperature of between 260°C and 580°C.
2. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the lithium precursor is chosen selected from the group consisting of $\text{LiOH}\cdot\text{H}_2\text{O}$, LiCl , LiNO_3 or and a lithium salt of a carboxylic acid.
3. (Currently Amended) The method as claimed in claim 2, characterized in that wherein the lithium carboxylic acid salt is chosen selected from the group consisting of lithium acetylacetone, lithium acetate, lithium stearate, lithium formate and lithium oxalate.
4. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the lithium precursor is introduced in powder form into the reaction medium.
5. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the lithium precursor is introduced into the aqueous solution at the same time as the $\alpha\text{-V}_2\text{O}_5$.
6. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the lithium precursor is introduced into the reaction medium after the addition of $\alpha\text{-V}_2\text{O}_5$, before the end of gelling.

7. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the duration of the heat treatment is between 10 minutes and 10 hours.

8. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the respective Li precursor and α -V₂O₅ quantities in the reaction medium are preferably such that:

- 0.16 mol/l < [Li] < 0.55 mol/l;
- 0.22 mol/l < [V₂O₅] < 0.75 mol/l; and
- 1.15 < [V₂O₅]/[Li] < 1.5.

9. (Currently Amended) The method as claimed in claim 1, characterized in that wherein the hydrogen peroxide concentration in the reaction medium is between 10% and 50% by volume.

10. (Currently Amended) A compound of formula Li_{1+ α} V₃O₈ [[()]] where 0.1 < α < 0.25[()]] consisting of comprising needle-shaped particles that have a bimodal distribution and have a width l , a length L and a thickness t such that:

- the needles of a first mode have a length L of 10 to 50 μ m;
- the needles of a second mode have a length L of 1 to 10 μ m; and
- 4 < L/l < 100 and 4 < L/t < 100.

11. (Currently Amended) A positive electrode for a lithium battery, characterized in that it contains comprising an Li_{1+ α} V₃O₈ compound as claimed in claim 10 as active material.

12. (Currently Amended) The positive electrode as claimed in claim 11, characterized in that wherein it further contains comprises:

- a binder conferring mechanical integrity;
- a material conferring electronic conduction; and
- optionally, a compound conferring ionic conduction.

13. (Currently Amended) The positive electrode as claimed in claim 12, ~~characterized in that wherein~~:

- the content of active material is between 40 and 90% by weight;
- the content of binder is from 5 to 15% by weight;
- the content of material conferring electronic conduction is 5 to 20% by weight;

and

- the content of compound conferring ionic conduction is less than 15% by weight.

14. (Currently Amended) The positive composite electrode as claimed in claim 12, ~~characterized in that wherein~~ the material conferring electronic conduction is a carbon black.

15. (Currently Amended) The electrode as claimed in claim 12, ~~characterized in that wherein~~ the binder is formed by a non-solvating polymer, a solvating polymer or a blend of the two.

16. (Currently Amended) The electrode as claimed in claim 15, ~~characterized in that wherein~~ the binder further ~~contains~~ comprises an aprotic polar compound.

17. (Currently Amended) The electrode as claimed in claim 12, ~~characterized in that wherein~~ the compound conferring ionic conduction is a lithium salt, ~~chosen selected~~ from the group consisting of LiClO₄, LiPF₆, LiAsF₆, LiBF₄, LiR_FSO₃, LiCH₃SO₃, lithium bis(perfluoro-alkyl)sulfonimides, lithium bis(perfluorosulfonyl)methides and lithium tris(perfluorosulfonyl)methides.

18. (Currently Amended) A battery comprising a positive electrode and a negative electrode separated by an electrolyte comprising a lithium salt dissolved in a solvent, ~~characterized in that wherein~~ the positive electrode is an electrode as claimed in ~~one of claims 11 to 17~~ claim 11.